

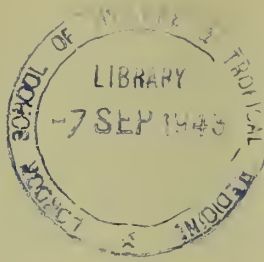


## APPENDICE.

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# RAPPORT DE L'OFFICIER DE LA SANTÉ PUBLIQUE, 1911.





# RAPPORT DE L'OFFICIER DE LA SANTÉ PUBLIQUE.

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## Letter from the President of the Board.

States Office, Guernsey, June 7th, 1912.

SIR,

I have the honour to present the Thirteenth Annual Report of the Medical Officer of Health for the year 1911, and to request that it may be printed as an Appendix to the "Billet d'État," and that a certain number of copies (say 100) be struck off for distribution in the usual way.

I have, &c., &c.,

JOHN N. BROUARD,  
President, Board of Health.

William Carey, Esq., Bailiff,  
and President of the States of Guernsey.

## GUERNSEY.

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Area in statute acres—15,723.

Area in square miles—24·5.

POPULATION.—Males —20,395

Females—21,459—41,854

HOUSES.—Inhabited—9,710.

Unhabited —427.

Constructing—27.

Density of population per acre—2·6.

„ „ per square mile—1,664.

Average number of inhabitants per house—4·3.

Death rate per 1,000=17·4.

Average previous 10 years—14·9.

Birth rate per 1,000=22·6.

Average previous 10 years—26·2.

Rainfall, 1911—37·11 inches.

North end of island, Fort Doyle—27·97.

Average rainfall—36·43.

Sunshine—2,121 hours.

Sunshine average—1,922 hours.

# REPORT FOR 1911.

## POPULATION.

The result of the Census was a surprise as it shewed that the increase of population had been during the last decade considerably less than was anticipated, amounting to 3·4 per cent., compared with an increase of 14·8 per cent. between the years 1881-1891.

When the complete statistics are available the population at various ages can be compared with the previous Census, and also that of the alien population.

If, as appears probable, a large number of persons in the prime of life have left the island during the past ten years, an increase in the death rate might be expected, and a decrease in the birth rate.

The population on April 1st was stated to be 41,854—20,395 males and 21,459 females.

In Table I. will be found the population, birth and death rates for the past 10 years, corrected in accordance with the recent census figures.

**Table I.** (INCORP. SOC. OF M. O. H., 1900 (FOR WHOLE DISTRICT).

YEAR.	Population estimated to middle of each year.	BIRTHS.		DEATHS UNDER ONE YEAR OF AGE.		DEATHS AT ALL AGES.	
		Number.	Rate per 1,000.	Number.	Rate per 1,000 registered.	Number.	Rate per 1,000.
Column ...	1	2	3	4	5	6	7
1901.....	40,300	1,096	27·2	190	171·3	699	17·3
1902.....	40,475	1,128	27·0	161	142·7	657	16·2
1903 .....	40,650	1,120	27·5	112	100·0	597	14·6
1904.....	40,795	1,144	28·0	181	158·2	690	16·9
1905.....	40,884	1,129	27·6	155	135·0	644	15·7
1906.....	40,990	1,112	27·1	154	138·4	588	14·3
1907.....	41,174	1,068	25·9	123	115·1	606	14·8
1908.....	41,350	1,005	24·3	131	131·0	591	14·3
1909.....	41,524	1,013	24·3	111	109·6	521	12·5
1910.....	41,670	989	23·7	107	107·0	549	13·1
Averages for ten years, 1901-1910.	40,981	1,080	26·2	142	130·8	621	14·9
1911.....	41,854	946	22·6	197	208	734	17·4

## BIRTHS.

The number of births was 946, a rate of 22·6 per 1,000. This is the second year in succession in which the births fell below 1,000, which has not occurred since the year 1882, but the rate was then 28·4.

The number of illegitimate births was 42, a percentage to the total of 4·4.

The birth rate in England and Wales was 24·4.

Fifty children were registered as still-born.

## DEATHS.

The large number of 734 deaths occurred during the year—380 males and 354 females.

This means a rate of 17·4 per 1,000, a higher figure than any years since 1898, although the rate in 1901 closely approached it. The deaths numbered 185 more than in 1910, and 213 more than in 1909. An analysis of the increases compared with the average of the previous 5 years is as follows :—

	1911.	1906-1910.
Measles .....	50	2·6
Whooping Cough .....	21	7·5
Epidemic Enteritis .....	64	12·0
Diphtheria .....	10	5·4
Scarlet Fever .....	6	2·2
Senile Decay.....	75	65·6
Cancer .....	53	46·4
Broncho-Pneumonia .....	19	7·6
Pneumonia .....	29	18·2
Heart Disease .....	72	62·2
Apoplexy .....	34	28·2

Deaths in Public Institutions were as follows :—

	1911.
Town Hospital.....	62
Town Asylum .....	5
Castel Hospital .....	27
Castel Asylum.....	2
Victoria Cottage Hospital.....	13
King Edward Sanatorium. ....	16

The death rate for the Town was 19·4, and for the rest of the Island, 16·1.

The corrected death rate for England and Wales was 14·6; for London, 15·8; the 77 great towns, 16·4; and the country, *i.e.*, excluding the 213 towns, 13·1.

IX.—1912.



## INFANTILE DEATH RATE.

The infantile death rate was exceedingly high, namely 208 per 1,000 births, and in England would only be equalled by a few large towns in manufacturing districts with an unenviable notoriety in this respect.

It must, however, be remembered that severe epidemics of Measles, Whooping Cough and Epidemic Diarrhœa were unfortunately with us during the year, and to these causes are chiefly due the great increase in the number of these deaths.

The average for the past 10 years was 130·8 and the following are the rates in the separate districts :—

	1911.	1910.	1904-1910.
Town .....	250 .....	111 .....	124
St. Sampson's .....	300 .....	84 .....	154
Vale .....	111 .....	143 .....	131
Other Parishes .....	164 .....	100 .....	116

For England and Wales the rate for 1911 was 130, in London, 128, and in the country without the 213 towns, 118.

The Notification of Births Act, 1907, is a measure widely adopted by Borough and Urban districts in England, with the view of assisting indirectly in the reduction of Infantile mortality. It directs that the father or other person stated shall notify the M.O.H. within 36 hours of the birth of a child. In the poorer districts the mother is visited by a health visitor—a trained nurse—who advises the mother as to the bringing up of the child. There is ample scope for such a measure here in the urban districts, as the pamphlets entitled “How to bring up children” (printed in both French and English) which are given to every parent when the birth of a child is registered, seem to fail in their purpose.

Epidemic Enteritis caused the death of 64 children, of whom 60 were under the age of 1 year. Deficiency of rainfall, plus high atmospheric and soil temperatures, are the chief external conditions favourable for its development, and they were present in marked degree in 1911.

For the three months, July, August and September, the following were the increases of temperatures and decreases of rainfall compared with the averages :—

	Air Temperature. F.	4ft. earth thermometer. F.	Rainfall. ins.
July .....	2·8 .....	1·2 .....	—1·24
August.....	4·6 .....	2·4 .....	—1·78
September .....	3·7 .....	3·2 .....	—1·64

IX.—1912.

In July one death was registered, in August 20, and in September 41.

There were 30 deaths in the Town Parish, 15 in St. Sampson's, 7 in the Vale, 5 in St. Martin's, 3 in St. Andrew's.

Infantile Diarrhœa is usually due to contaminated foods, but is largely spread by filth and flies. During the hot months of the year the Board circulated leaflets dealing with flies as the carriers of death and disease, and shewing that clean houses and surroundings, food and drink kept as cool and clean as possible, and protected from flies, cleanliness of body, clothing, and domestic utensils, including babies' bottles, &c., were the best measures for the prevention of diarrhœa.

As regards the municipality, the better the system of refuse collection and the watering of the streets in the hot and dry months of the year, the better will be the health, not only of the children, but of the inhabitants generally.

In a small population, such as ours is, the infant death rate will vary from time to time, being affected by the absence or presence of epidemics, and when, as in 1911, the occurrence in epidemic form of three very fatal infantile diseases has to be recorded, the death rate must be an abnormally high one.

#### MARRIAGES.

The number of marriages in 1911 was 288, a rate of 13·7 per 1,000.

Of these 184 took place in Church of England, 23 in Roman Catholic, 34 in Nonconformist Churches, and 47 at the Greffe Office.



Table II.

RETURN OF BIRTHS AND DEATHS REGISTERED DURING THE YEAR 1911.

BIRTHS.												
PARISH LETTER:	A	B	C	D	E	F	G	H	I	K	Tl.	
Males .....	179	74	79	39	13	22	7	14	36	22	485	
Females .....	173	66	65	43	15	27	6	14	37	15	461	
Totals .....	352	140	144	82	28	49	13	28	73	37	946	

DEATHS.												
GENERAL DISEASES AND INJURIES.												
<i>Diseases of the Blood.</i>												
Diabetes.....	3	-	-	-	-	-	-	-	1	-	4	
Eczema ..	-	-	-	-	-	-	-	-	-	1	1	
Luchæmia .....	-	-	1	-	-	-	-	-	-	-	1	
Myxœdema .....	2	1	-	-	-	-	-	-	-	-	3	
Osteo-arthritis .....	-	-	1	-	1	-	-	-	-	-	2	
Pernicious Anæmia.....	-	-	1	-	-	-	-	-	-	1	2	
Purpura.....	-	-	-	-	-	1	-	-	-	-	1	
Rheumatism .....	1	-	-	-	-	-	-	-	-	-	1	
Ricketts .....	1	-	-	-	-	1	-	1	1	-	4	
<i>Epidemic.</i>												
Diphtheria .....	1	-	-	9	-	-	-	-	-	-	10	
Enteritis .....	30	15	7	-	1	1	-	2	5	3	64	
Influenza .....	-	-	-	1	-	-	-	-	-	-	1	
Measles .....	20	13	3	3	-	-	-	-	9	2	50	
Scarlet Fever .....	1	-	1	4	-	-	-	-	-	-	6	
Whooping Cough .....	10	2	2	1	1	-	-	1	4	-	21	
<i>Ill Defined.</i>												
Hæmorrhage.....	-	-	1	-	-	-	-	-	-	-	1	
<i>Infancy and Old Age.</i>												
Asthenia .....	3	1	-	-	-	-	-	-	-	-	4	
Atelectasis.....	-	1	-	-	-	-	-	-	-	-	1	
Congenital Malformation .	5	1	1	1	-	2	-	-	-	-	10	
Convulsions .....	9	1	2	1	-	1	-	2	-	-	16	
Debility from Birth.....	5	1	3	1	1	-	1	2	1	-	15	
Injury at Birth.....	1	-	-	-	-	-	-	-	-	-	1	
Marasmus ...	12	3	-	2	-	-	1	-	1	-	19	
Premature Birth .....	5	2	-	1	-	6	1	-	1	-	16	
Senile Decay.....	35	15	10	6	1	1	1	2	3	1	75	
Carried forward .....	144	56	33	30	5	13	4	8	28	8	329	

PARISH LETTER:	A	B	C	D	E	F	G	H	I	K	Tl.
Brought forward .....	144	56	33	30	5	13	4	8	28	8	329

*Infective.*

General Tuberculosis .....	4	..	-	1	..	-	..	-	..	-	1	6
Phthisis.....	16	..	4	3	2	1	..	-	..	-	5	31
Tabes Mesenterica .....	1	..	3	..	-	..	-	..	-	..	-	4
Tubercular Enteritis .....	-	..	-	..	1	..	-	..	-	..	-	1
„ Knee .....	1	..	-	..	-	..	-	..	-	..	-	1
„ Meningitis.....	2	..	-	..	-	1	1	..	-	..	-	4
„ Peritonitis.....	1	..	-	..	-	..	-	..	-	1	..	2

*Intemperance.*

Alcoholism ..	1	..	-	..	-	..	-	..	-	1	..	1	3
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*Septic.*

Septicæmia .....	8	..	1	..	-	1	..	-	..	-	..	-	10
Ulcerative Endocarditis ...	1	..	-	..	-	..	-	..	-	..	-	..	1

*Tumour.*

Malignant .....	27	..	7	..	2	..	6	..	2	..	1	..	-	2	..	4	..	2	..	53
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*Violence.*

Drowning .....	4	..	-	..	-	..	-	..	-	..	-	..	-	..	-	..	-	..	-	4
Fall .....	5	..	1	..	-	..	-	..	-	..	-	..	-	..	-	..	-	..	-	6
Hanging (Suicide) .....	1	..	-	..	-	1	..	-	..	-	..	-	..	-	..	-	..	-	..	2
Suffocation .....	1	..	-	..	-	1	..	-	..	-	..	-	..	-	..	-	..	-	..	2
Suicide .....	2	..	-	..	-	..	-	..	-	..	-	..	-	..	-	..	-	..	-	2
Sunstroke .....	-	..	1	..	-	..	-	..	-	..	-	..	-	..	-	..	-	..	-	1

## DISEASES OF SPECIAL ORGANS.

*Alimentary.*

Appendicitis .....	1	..	-	..	-	..	-	..	-	..	-	..	-	..	-	..	-	..	-	1
Dysentery .....	1	..	-	..	-	..	-	..	-	..	-	..	-	..	-	..	-	..	-	1
Gall Stone.....	1	..	-	..	-	..	-	..	-	..	-	..	-	..	-	..	-	..	-	1
Hernia .....	2	..	-	..	-	..	-	..	-	..	-	..	-	..	-	..	-	..	-	2
Intestines .....	3	..	1	..	-	..	-	..	-	..	-	..	-	..	-	1	..	-	..	5
Liver .....	2	..	-	..	1	..	-	..	-	..	-	..	-	..	-	..	-	..	-	3
Pancreas .....	1	..	-	..	-	..	-	..	-	..	-	..	-	..	-	..	-	1	..	2
Stomach .....	3	..	-	..	-	1	..	-	..	-	1	..	-	..	-	..	-	..	-	5

Carried forward .....	233	74	40	43	9	15	5	11	39	13	482
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IX.—1912.

## APPENDICE.

11

PARISH LETTER:	A	B	C	D	E	F	G	H	I	K	Tl.
Brought forward .....	233	74	40	43	9	15	5	11	39	13	482

*Circulatory.*

Aneurysm .....	2	...	-	...	-	...	-	...	-	...	-	...	-	...	2
Apoplexy .....	15	...	1	...	4	...	8	...	1	...	2	...	-	...	34
Atheroma .....	4	...	-	...	2	...	2	...	-	...	-	...	-	...	8
Embolism .....	1	...	-	...	-	...	-	...	-	...	-	...	-	...	1
Gangrene .....	-	...	-	...	1	...	2	...	-	...	-	...	-	...	3
Heart Disease .....	29	...	6	...	5	...	12	...	-	...	4	...	-	...	72
Pericarditis .....	1	...	-	...	-	...	-	...	-	...	-	...	-	...	1
Thrombosis .....	2	...	-	...	1	...	-	...	-	...	1	...	-	...	4
Angina Pectoris .....	-	...	-	...	-	...	1	...	-	...	-	...	-	...	1

*Nervous.*

Dementia .....	-	...	-	...	-	...	1	...	-	...	-	...	-	...	1
Disseminated Sclerosis ..	1	...	-	...	-	...	-	...	-	...	-	...	-	...	1
Encephalitis ..	1	...	-	...	-	...	-	...	-	...	-	...	-	...	1
Epilepsy .....	1	...	-	...	-	...	-	...	1	...	1	...	-	...	3
General Paralysis of Insane	-	...	-	...	-	...	-	...	-	...	-	...	1	...	1
Imbecility .....	-	...	1	...	-	...	-	...	-	...	-	...	-	...	1
Meningitis .....	1	...	2	...	-	...	-	...	-	...	-	...	-	...	3
Paralysis .....	4	...	-	...	-	...	-	...	-	...	1	...	-	...	5
Paralysis Agitans.....	1	...	-	...	-	...	-	...	-	...	1	...	-	...	2
Tabes Dorsalis .....	1	...	-	...	-	...	-	...	-	...	-	...	-	...	1

*Respiratory.*

Bronchitis .....	16	...	8	...	2	...	-	...	-	...	1	...	-	...	29
Broncho-Pneumonia .....	7	...	1	...	5	...	2	...	1	...	-	...	-	...	19
Pleurisy .....	2	...	-	...	-	...	2	...	-	...	-	...	-	...	4
Pneumonia .....	16	...	5	...	2	...	2	...	-	...	-	...	-	...	29
Pleuro-Pneumonia .....	2	...	-	...	-	...	-	...	-	...	-	...	-	...	2
Tonsillitis .....	-	...	-	...	-	...	1	...	-	...	-	...	-	...	1

*Urinary.*

Nephritis .....	11	...	3	...	3	...	2	...	-	...	1	...	-	...	22
Stricture .....	-	...	-	...	-	...	-	...	-	...	-	...	-	...	1
Totals.....	351	...	101	...	65	...	78	...	12	...	24	...	6	...	734

STILL BIRTHS .....	14	...	14	...	4	...	5	...	1	...	1	...	2	...	2	...	4	...	3	...	50
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Tabl  
(INCP. SO

A					B				C				D				E			
Names of Parishes.	ST. PETER-PORT.				ST. SAMPSON'S.				THE VALE.				CASTEL.				ST. SAVIOUR'S.			
YEAR.	Population estimated according to Census.	Births registered.	Deaths at all ages.	Deaths under 1 year.	Population estimated according to Census.	Births registered.	Deaths at all ages.	Deaths under 1 year.	Population estimated according to Census.	Births registered.	Deaths at all ages.	Deaths under 1 year.	Population estimated according to Census.	Births registered.	Deaths at all ages.	Deaths under 1 year.	Population estimated according to Census.	Births registered.	Deaths at all ages.	Deaths under 1 year.
Column ...	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
1901.....	18162	440	303	66	5573	166	95	31	5082	167	101	45	2802	69	64	11	1062	27	14	3
1902.....	—	459	302	60	—	175	83	25	—	168	77	28	—	65	60	10	—	27	16	2
1903.....	—	421	264	38	—	200	85	26	—	173	72	25	—	87	55	6	—	26	15	1
1904.....	—	461	321	77	—	165	87	37	—	164	71	26	—	104	46	9	—	29	30	4
1905.....	—	461	302	59	—	180	77	17	—	173	72	21	—	90	62	16	—	29	12	1
1906.....	—	427	268	54	—	174	64	29	—	145	69	21	—	93	64	12	—	32	18	7
1907.....	—	392	275	44	—	160	75	26	—	146	68	14	—	77	74	12	—	30	15	1
1908.....	—	366	257	44	—	163	93	34	—	144	57	16	—	88	70	10	—	38	14	3
1909.....	—	383	240	36	—	175	66	22	—	137	60	16	—	78	55	9	—	27	17	7
1910.....	—	368	242	41	—	165	64	14	—	139	68	20	—	71	60	9	—	29	14	3
Average of 10 years to 1910.	—	418	277	52	—	172	79	26	—	156	71	23	—	82	61	10	—	29	16	3
1911. Census Yr.	18052	352	351	88	5952	140	101	42	5486	144	65	16	3082	82	78	8	1075	28	12	1

III.

OF M. O. H., 1900.)

F					G				H				I				K			
Names of Parishes.	ST. PETER-IN-THE- WOOD.				TORTEVAL.				FOREST.				ST. MARTIN'S.				ST. ANDREW'S.			
YEAR.	Population estimated according to Census.	Births registered.	Deaths at all ages.	Deaths under 1 year.	Population estimated according to Census.	Births registered.	Deaths at all ages.	Deaths under 1 year.	Population estimated according to Census.	Births registered.	Deaths at all ages.	Deaths under 1 year.	Population estimated according to Census.	Births registered.	Deaths at all ages.	Deaths under 1 year.	Population estimated according to Census.	Births registered.	Deaths registered.	Deaths under 1 year.
Column ...	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
901.....	1577	57	23	8	446	6	6	2	842	27	20	7	3201	88	46	10	1552	49	27	6
902.....	—	53	31	11	—	14	12	4	—	30	13	4	—	93	43	14	—	44	20	3
903.....	—	56	16	4	—	8	12	1	—	22	13	3	—	90	38	4	—	37	27	4
904.....	—	52	35	8	—	10	6	0	—	27	20	5	—	91	51	10	—	41	23	5
905.....	—	56	29	4	—	22	10	0	—	19	15	0	—	86	43	10	—	40	22	7
906.....	—	60	25	9	—	6	9	2	—	26	15	6	—	107	45	13	—	42	11	1
907.....	—	60	16	8	—	20	6	1	—	32	17	5	—	97	39	8	—	54	21	4
908.....	—	44	29	8	—	14	4	2	—	27	11	4	—	78	38	8	—	43	18	2
909.....	—	41	13	6	—	14	9	1	—	38	17	3	—	79	34	6	—	41	10	5
910.....	—	49	30	8	—	14	4	1	—	32	17	2	—	81	40	5	—	41	15	4
Average of 10 years to 1910.	—	53	25	7	—	13	8	1	—	28	16	4	—	89	42	9	—	43	19	4
1911. Census Yr.	1612	49	24	11	499	13	6	4	910	28	15	4	3436	73	64	20	1750	37	18	3



Table IV.

CAUSE OF, AND AGES AT, DEATH OF THE DEATHS REGISTERED  
DURING THE YEAR 1911.

CAUSE OF DEATH.	All Ages.	Under 1.	WHOLE ISLAND.				66 and upw'ds.						
			1-5.	6-15.	16-25.	26-65.							
GENERAL DISEASES AND INJURIES.													
<i>Diseases of the Blood.</i>													
Diabetes .....	4	...	—	...	—	...	2	...	2				
Eczema .....	1	...	—	...	1	...	—	...	—				
Luchæmia .....	1	...	—	...	1	...	—	...	—				
Myxœdema .....	3	...	—	...	—	...	3	...	—				
Osteo-arthritis.....	2	...	—	...	—	...	1	...	1				
Pernicious Anæmia.....	2	...	—	...	—	...	1	...	1				
Purpura .....	1	...	1	...	—	...	—	...	—				
Rheumatism .....	1	...	—	...	—	...	1	...	—				
Ricketts .....	4	...	1	...	2	...	1	...	—				
<i>Epidemic.</i>													
Diphtheria .....	10	...	—	...	6	...	4	...	—				
Enteritis .....	64	...	60	...	4	...	—	...	—				
Influenza .....	1	...	1	...	—	...	—	...	—				
Measles .....	50	...	18	...	29	...	3	...	—				
Scarlet Fever .....	6	...	—	...	4	...	2	...	—				
Whooping Cough .....	21	...	11	...	10	...	—	...	—				
<i>Ill Defined.</i>													
Hæmorrhage .....	1	...	—	...	—	...	—	...	1				
<i>Infancy and Old Age.</i>													
Asthenia .....	4	...	3	...	—	...	—	...	1				
Atelectasis .....	1	...	1	...	—	...	—	...	—				
Congenital Malformation ...	10	...	8	...	2	...	—	...	—				
Convulsions .....	16	...	13	...	3	...	—	...	—				
Debility from Birth .....	15	...	13	...	2	...	—	...	—				
Injury at Birth .....	1	...	1	...	—	...	—	...	—				
Marasmus .....	19	...	17	...	2	...	—	...	—				
Premature Birth.....	16	...	16	...	—	...	—	...	—				
Senile Decay .....	75	...	—	...	—	...	—	3	...	72			
Carried forward .....	329	..	164	...	65	...	10	...	1	...	12	...	77

IX.—1912.

IX.—1912.



CAUSE OF DEATH.	WHOLE ISLAND.							
	All Ages.	Under 1.	1-5.	6-15.	16-25.	26-65.	66 and upw'ds.	
Brought forward.....	329	164	65	10	1	12	77	

*Infective.*

General Tuberculosis .....	6	2	3	1	—	—	—	✓
Phthisis .....	31	—	—	2	6	23	—	
Tabes Mesenterica .....	4	2	2	—	—	—	—	✓
Tubercular Enteritis .....	1	—	—	—	—	1	—	
„ Knee .....	1	—	1	—	—	—	—	✓
„ Meningitis .....	4	1	1	1	—	1	—	✓
„ Peritonitis .....	2	—	—	1	1	—	—	✓

*Intemperance.*

Alcoholism .....	3	—	—	—	—	3	—	
------------------	---	---	---	---	---	---	---	--

*Septic.*

Septicæmia .....	10	1	—	—	—	8	1	
Ulcerative Endocarditis.....	1	—	—	—	1	—	—	

*Tumour.*

Malignant .....	53	—	1	—	—	26	26	
-----------------	----	---	---	---	---	----	----	--

*Violence.*

Drowning .....	4	—	—	1	2	1	—	
Fall .....	6	—	—	—	1	4	1	
Hanging (Suicide) ..	2	—	—	—	1	1	—	
Suffocation .....	2	1	—	—	—	1	—	
Suicide.....	2	—	—	—	1	1	—	
Sunstroke .....	1	—	—	—	—	1	—	

## DISEASES OF SPECIAL ORGANS.

*Alimentary.*

Appendicitis .....	1	—	—	1	—	—	—	
Dysentery .....	1	—	1	—	—	—	—	
Gall Stone .....	1	—	—	—	—	—	1	
Hernia .....	2	1	—	—	—	—	1	
Intestines .....	5	1	—	—	—	3	1	
Liver .....	3	—	—	—	—	2	1	
Pancreas .....	2	—	—	—	—	1	1	
Stomach .....	5	—	—	1	—	4	—	

Carried forward ..... 482...173 ... 74 ... 18 ... 14 ... 93 ...110  
IX.—1912.

CAUSE OF DEATH.	WHOLE ISLAND.							
	All Ages.	Under 1.	1-5.	6-15.	16-25.	26-65.	66 and upw'ds.	
Brought forward.....	482	173	74	18	14	93	110	
<i>Circulatory.</i>								
Aneurysm ..	2	—	—	—	—	2	—	
Angina Pectoris .....	1	—	—	—	—	—	1	
Apoplexy .....	34	—	—	—	—	10	24	
Atheroma .....	8	—	—	—	—	2	6	
Embolism .....	1	—	—	—	—	1	—	
Heart Disease .....	72	—	—	1	—	24	47	
Gangrene.....	3	—	—	—	—	1	2	
Pericarditis .....	1	—	—	—	—	1	—	
Thrombosis .....	4	—	—	—	—	2	2	
<i>Nervous.</i>								
Dementia.....	1	—	—	—	—	1	—	
Disseminated Sclerosis .....	1	—	—	—	—	1	—	
Encephalitis .....	1	—	—	—	1	—	—	
Epilepsy .....	3	—	—	—	—	3	—	
General Paralysis of Insane.	1	—	—	—	—	1	—	
Imbecility .....	1	—	—	—	—	1	—	
Meningitis .....	3	1	—	1	—	1	—	
Paralysis .....	5	—	—	—	—	2	3	
Paralysis Agitans .....	2	—	—	—	—	2	—	
Tabes Dorsalis .....	1	—	—	—	—	—	1	
<i>Respiratory.</i>								
Bronchitis .....	29	14	3	1	—	—	11	
Broncho-Pneumonia .....	19	5	11	—	1	—	2	
Pleurisy .....	4	1	—	—	—	1	2	
Pleuro-Pneumonia .....	2	—	—	—	1	—	1	
Pneumonia .....	29	3	5	2	1	7	11	
Tonsillitis .....	1	—	—	—	—	1	—	
<i>Urinary.</i>								
Nephritis.....	22	—	—	1	1	9	11	
Stricture .....	1	—	—	—	—	—	1	
Totals .....	734	197	93	24	19	166	235	

*Senile Decay*: Under 66, 3; between 66-80, 32; 81-90, 35; 91-100, 5. ,  
IX.—1912.

## TUBERCULOSIS.

The number of deaths from all forms of Tuberculosis was 49, and from Phthisis 31, giving rates per 1,000 respectively of 1·17 and 0·74.

This compares with the last available figures for England and Wales of 1·52 and 1·08.

There were 21 deaths of males, death occurring at an average age of 37·1, and 10 deaths of females at an average of 36·3 years.

A comparison of the three previous years gives a total of 59 male and 48 female deaths, at average ages of 35·2 and 27 years respectively.

The mortality from Phthisis has fallen by more than 50 per cent. during the last half century, and the latest statistics shew that tuberculosis has diminished during the last ten years in England by 19%, in Scotland and Ireland 24%, in London 30%, and in Paris only 3%.

Nothing has been done during the year to deal with the Tuberculosis problem in the way suggested in my last report, but the compulsory notification of all cases of Pulmonary Tuberculosis will become law early in 1912. It behoves us therefore to ensure that the information thus furnished will be followed up by useful and practical measures, or it will only be of service for statistical purposes, a somewhat barren result.

Tuberculosis is perhaps the commonest disease on the face of the earth, and as the source of infection is so widely spread it must also be one of the most easily cured in its early stages under suitable conditions, as probably one-third of the population has at one time or another suffered from the disease without having been aware of it, or without its presence causing any recognisable symptoms.

Professor Sims Woodhead speaking at the conference on Tuberculosis in 1910, in quoting a statement that 90 per cent. of the people who live to the age of 45 have at one time or another suffered from some form of tuberculosis, added that he would not be astonished to find that the percentage was even higher.

Dr. R. W. Phillip states that from personal observation of the school-children of Edinburgh, he concludes that 30 per cent. of them presented evidence of tuberculosis, determinable by ordinary clinical methods. He also says that, "statistics of numerous pathological observers tend towards the common conclusion that by the time the fifteenth year is reached, 75 per cent. of children have been tuberculised."

In addition to a considerable dose of the poison being necessary a lowering of the general health is also required for the bacilli to successfully invade the body; if the latter be only a temporary condition, the bacilli will be soon overwhelmed.

As a result of post-mortem examinations upon persons who have died in work-houses and hospitals, who often in life suffered from the effects of drink, insufficient food and clothing, and exposure to all weathers, it has been found that in 20 to 30 per cent. of these cases lesions of *healed* Tuberculosis have been found in their lungs. These facts should tend to lessen the pessimistic attitude concerning consumption which is often taken up by people in Guernsey, particularly in the country districts.

The final report of the Royal Commission upon Tuberculosis has called attention to the fact that some forms of human tuberculosis, tubercular glands of neck, abdominal tuberculosis, and lupus, are largely due to the consumption of milk from tuberculous cows. As bovine tuberculosis is rare in Guernsey these affections are also rare, and this is the more remarkable as enlarged tonsils and decayed teeth with consequently unhealthy gums, which often are the portals of infection, are in my opinion unduly prevalent here.

Since the discovery of the tubercle bacillus as the actual cause of tuberculosis, the sense of proportion as to the importance of it and pre-disposing causes seems to have been lost. No effort should be spared to destroy it wherever possible, but it is equally important that the natural powers of resistance of the body should be developed to the utmost by temperance, good food, and good housing accommodation, where fresh air, light and cleanliness are conspicuous features.

In alluding to bovine tuberculosis the experiences in 1911 have been as satisfactory as those of previous years, but there is reason to believe that the same will not be said when the year 1912 comes under review.

It is of the utmost, even of vital, importance to our community that this disease should be as conspicuous by its absence as it has been in the past, and no efforts and no expense should be spared to effect this object. Half measures are of no avail and only mean that we waste the money spent in such a manner.

In my opinion, nothing short of the testing, with Tuberculin, the whole of the cattle in Guernsey, with the slaughter of those found affected with tuberculosis, will suffice to stamp out the disease, and the longer this is

deferred the larger will be the number of animals infected. Unfortunately the Supervisor's excellent suggestion that no animal should be moved from one farm to another unless certified to have passed the Tuberculin test was not adopted by the States. In itself this would have gone a long way to limit and stamp out the disease.

The figures previously mentioned relating to the incidence of tuberculosis in children, and the cause of the disease in great measure being due to the drinking of tuberculous milk, should bring home to us the enormous responsibilities of the present time.

In England the problem of tuberculous cattle is surrounded by many and great difficulties, which fortunately only exist here in a minor degree, and if we now fail in our duty in this matter the inevitable disastrous consequences will follow.

However clean and well-constructed a cattle shed may be, and such a description does not apply to the greater number of sheds here, tuberculosis will spread in it if an affected animal be introduced, although of course not so quickly as in the less satisfactory sheds in which the health of the cattle will not be so good and their power of resistance to disease less.

Subsequently a periodical testing of cattle will be necessary, and without it disinfection of sheds will not serve to permanently banish the disease.

Some sheds it is not possible to disinfect properly by artificial methods and no attempt has been made to do so, the law directing that under these circumstances no bovine animals may be kept in them whilst they remain in such a condition.

The only practical way of dealing with them is by utilising the two great disinfecting agencies of nature, sunlight and fresh air.

If the roofs were taken off, and the interior thus exposed to the weather for the summer and autumn, they might then be reconstructed, and the source of infection would, I believe, be entirely destroyed.

Unfortunately it will be some time before the use of shelters instead of sheds becomes general, and if sheds must be built they should be without lofts and with a roof of galvanised iron so constructed that with little trouble the iron sheets could be removed when the cattle are first put out, and not replaced until the cattle are again put in.

It has been well said that to keep a herd clear of tuberculosis is as difficult a matter as to free it in the first place, and can only be accomplished by constant effort.



If the Guernsey cow loses its good name the loss to the farmers will be enormous as it will cease to fetch the high price it now does, and the export trade will be a thing of the past. The question is often asked, "Can cattle develop tuberculosis by infection from persons suffering from consumption?" The answer is that they can, but such infection is fortunately very rare indeed. In no instance has a culture been isolated by the English or German Commissions directly from cattle, shewing the characteristics of the human type, and the Imperial German Commission report that the infection of bovines with human bacilli is a very difficult matter.

#### KING EDWARD SANATORIUM.

Including one case of Rotheln, 268 cases of Infectious disease were dealt with during the year by the Board of Health, of which number 250 were treated at the Sanatorium or Mont Crevelt Hospitals, and 18 in their own homes.

The daily average of patients was 26·4 (In April it was 44·8) and Staff 13·7.

In 1910 the patients admitted numbered 141, but the pressure was only great during the last four months of the year, the earlier months being comparatively quiet ones.

In my last report I endeavoured to show that the accommodation at the Sanatorium, which is nominally for 22 patients, was seriously deficient, and even this number might be lessened by certain combinations of sex and sickness.

The experience of this year only confirms this view and shews how urgent is the need of another ward, which will then give more room for the treatment of a considerable number of cases of Diphtheria and Scarlet Fever at the same time, without encroaching upon our isolation space for doubtful cases.

A severe epidemic of measles in the earlier months was a source of additional anxiety, and for the greater part of the year it was a constant struggle to provide room for the cases we were forced to take in.

In the month of April the daily average of patients was twice what it should have been.

The nursing staff suffered severely, 1 contracting Scarlet Fever, 3 Diphtheria, and 1 Enteric Fever.

The usual number of beds in an isolation hospital is one per 1,000 of population, and this in practice is not found to be an excessive provision.



Guernsey is an Island with great density of population, is an important seaport as well as a growing holiday and health resort, and should certainly conform to this standard as a minimum, in which case we should have 42 beds for isolation instead of the present number 22.

The incidence of infectious disease here is heavier than in most communities, and although two or three heavy years may be followed by a like period of slighter prevalence, the heavy years occur fairly regularly and must be provided for; such is the universal experience.

A considerable proportion of our population do not believe in the existence of infectious diseases, especially when the type is not a severe one, and the thirteen years in which isolation has been carried out have not been sufficient to overcome this belief. As a result concealment of such illnesses is very common. The existence of the type of house in which Diphtheria is prevalent has often been alluded to in my reports, and although the building of this class of house is not now allowed, still a large number of them are now inhabited and will not unfortunately permit of the necessary drastic alterations to remedy their defects. They will therefore continue to furnish cases of this disease in the future, particularly when the rainfall is heavy. The increased cost of living of late years has made it more difficult for the poorer classes who are not entitled to the readily available services of the parish doctor, to provide medical attendance for their families. That this is a real and pressing difficulty, the experience of the past year has shewn, and in many instances no doctor has been called in for cases of infectious disease during the acute illness, and the patients have thus spread infection in their homes, or in schools, during the convalescent stages, and have in addition suffered from sequelae which will cause lifelong damage to their health.

A scheme such as the National Insurance Act which would provide prompt medical aid for the poorer classes in sickness, in addition to its other beneficial effects, would I am sure do more than any other to diminish the amount of infectious disease in our community. I am sure that the medical profession would heartily support such a measure provided that it was an equitable one in which the interests of all classes concerned were fairly treated.

The large number of 584 bacteriological examinations were made in the States laboratory during the year.

This particular branch of our work tends every year to become more onerous, and will continue to increase as more medical men now make use of it than formerly was the case.

Table V.

CASES TREATED AT THE SANATORIUM AND AT HOME, 1911.

	St. Peter-Port.	St. Sampson's.	Vale.	Castel.	St. Saviour's.	St. Peter-in-the-Wood.	Torteval.	Forest.	St. Martin's.	St. Andrew's.	Total.
DIPHTHERIA.											
At the Sanatorium ...	82	15	3	5	0	1	0	0	4	2	112
At Home .....	4	0	0	1	0	0	0	0	0	0	5
Doubtful .....	0	0	0	0	0	0	0	0	0	0	0
Total .....	86	15	3	6	0	1	0	0	4	2	117
Deaths .....	1	0	0	9	0	0	0	0	0	0	10
SCARLET FEVER.											
At the Sanatorium ...	87	16	5	6	0	0	0	0	7	1	122
At Home .....	7	0	1	3	0	0	0	0	1	0	12
Doubtful .....	0	0	0	0	0	0	0	0	0	0	0
Total .....	94	16	6	9	0	0	0	0	8	1	134
Deaths .....	1	1	0	4	0	0	0	0	0	0	6
ENTERIC FEVER.											
At the Sanatorium ...	8	3	0	1	0	0	0	1	0	1	14
At Home .....	1	0	0	0	0	0	0	0	0	0	1
Doubtful .....	0	0	0	0	0	0	0	0	0	0	0
Total .....	9	3	0	1	0	0	0	1	0	1	15
ROTHELN .....	1	0	0	0	0	0	0	0	0	0	1
SMALLPOX .....	1	0	0	0	0	0	0	0	0	0	1
Grand Total ...	...	...	...	...	...	...	...	..	..	...	268

## CLASSIFIED ACCORDING TO AGES, 1911.

	0-1	1-5	5-10	10-15	15-20	20-25	25 & over.	Tl.
DIPHTHERIA .....	1	23	38	22	10	7	16	117
SCARLET FEVER .....	1	26	54	22	8	13	10	134
ENTERIC FEVER ...	-	-	1	4	2	1	7	15
ROTHELN .....	-	-	-	-	-	1	-	1
SMALLPOX .....	-	-	-	-	-	-	1	1
Total .....								268

## DIPHTHERIA.

Of the 117 cases notified, 112 were isolated in the Sanatorium and 5 in their own homes.

There were 82 from the Town parish, 15 from St. Sampson's, none from St. Saviour's, Torteval, or the Forest.

The first five months of the year gave 45 cases and the last three 46, the later months, as usual, giving the heavier incidence.

The type throughout was a malignant and infective one and there were 10 deaths, one dying at home, the disease not having been recognised.

There were 4 cases from the Town Hospital in November and December. As usual the difference between the North, the level district of the Town, and the South, the hilly part, was very marked, the latter having by far the larger incidence, the usual areas and type of houses being affected.

October was a wet month, and the most marked outbreak occurred then in connection with Melrose school, no less than 20 cases being due to infection from it. The wet weather and the knowledge that the school was infected caused a large number of absentees, thus adding to the difficulty of locating the cases, particularly as this school draws its scholars from a wider area than other schools.

The boys' school only furnished one case, and this case was infected by his sister, the girls' school bearing the brunt of the outbreak; the infants were only slightly infected.

Four adults were infected by children and nine cases were traced to their houses and verified by cultures, no doctor having been called in.

In three instances two cases occurred in each family, and in one no less than six children suffered as the result of the first infection, four being removed at the same time and two subsequently.

It was necessary to close these schools and disinfect them, and upon re-opening no further cases were reported. I was, however, informed that my visits to the school after re-opening for purposes of inspection gave offence to the parents, and many children were on that account taken away and sent to other schools. In epidemic times such transfers should not be allowed and strict inquiries should be made as to the antecedents of new scholars.

Table VI.

## DIPHTHERIA FOR 1911.

Parishes.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Tl.
St. Peter-Port.....	10	6	4	2	8	3	7	3	7	15	7	14	86
St. Sampson's.....	-	1	-	1	3	2	1	-	2	3	1	1	15
Vale.....	-	-	-	-	2	-	-	-	-	1	-	-	3
Castel .....	2	-	-	1	1	-	-	-	-	1	-	1	6
St. Saviour's .....	-	-	-	-	-	-	-	-	-	-	-	-	0
St. Peter-in-the-Wood .	-	-	1	-	-	-	-	-	-	-	-	-	1
Torteval .....	-	-	-	-	-	-	-	-	-	-	-	-	0
Forest .....	-	-	-	-	-	-	-	-	-	-	-	-	0
St. Martin's.....	-	-	2	-	1	-	-	-	-	-	1	-	4
St. Andrew's .....	-	-	-	-	-	-	-	1	-	1	-	-	2
Total .....	12	7	7	4	15	5	8	4	9	21	9	16	117
Died at Sanatorium ...	-	-	-	-	1	-	1	-	-	3	1	3	9
„ Home.....	-	-	-	-	1	-	-	-	-	-	-	-	1
Total.....													10

## SCARLET FEVER.

There were 134 cases of Scarlet Fever, 122 being treated at the Sanatorium and 12 in their own homes.

Many of these cases were complicated by concurrent attacks of measles, and there were four deaths at the Sanatorium and two at home.

There were 95 cases from the Town parish, and 16 from St. Sampson's, none from either of the four western parishes.

In February and March there were seven cases from the Town Hospital, two of them being nurses.

Contrary to the general experiences, the larger number of cases were notified in the first six months of the year, 103 against 31 for the last six.

It was not often that the first case in a family was notified and relationship and direct contact could be traced in a large number of cases.

School infection did not markedly predominate, but I cannot help thinking that the Cinematograph shows played some, indeed a new, part in spreading the disease, as they attract naturally large numbers of children who crowd together in badly ventilated halls. I believe that in the intervals of the performances efforts are made to ventilate the halls, but the necessary darkness does not favour cleanliness and encourages the growth of the organisms of disease.

I hope the proprietors of the shows will bear these facts in mind.

Table VII.

## SCARLET FEVER FOR 1911.

Parishes.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Tl.
St. Peter-Port .....	10	9	18	12	16	6	6	8	4	2	—	4	95
St. Sampson's.....	5	2	4	1	2	—	—	—	1	—	1	—	16
Vale.....	—	—	1	2	2	—	—	—	—	1	—	—	6
Castel ..	6	—	2	1	—	—	—	—	—	—	—	—	9
St. Saviour's .....	—	—	—	—	—	—	—	—	—	—	—	—	0
St. Peter-in-the-Wood .	—	—	—	—	—	—	—	—	—	—	—	—	0
Torteval .....	—	—	—	—	—	—	—	—	—	—	—	—	0
Forest .....	—	—	—	—	—	—	—	—	—	—	—	—	0
St. Martin's.....	—	1	2	1	—	—	—	—	—	2	—	1	7
St. Andrew's .....	—	—	—	—	—	—	—	—	—	—	1	—	1
Total .....	21	12	27	17	20	6	6	8	5	5	2	5	134
MEASLES .....	—	—	—	—	—	—	1	—	—	—	—	—	1
Died at Sanatorium ...	—	—	—	—	2	—	—	2	—	—	—	—	4
„ Home .....	2	—	—	—	—	—	—	—	—	—	—	—	2
Total.....													6

## ENTERIC FEVER.

There were 15 cases notified during the year, a number exactly double the average of the preceding ten years. As a rule a considerable proportion of our cases are imported ones, but in 1911 this was not so.

Only one case was isolated at home.

The first case was in April and came from the Forest parish, the cause of it could not be stated with certainty. As there was no room in the Sanatorium, it had to be accommodated in the Alexandra Home.

At the end of September two cases, both boys 10 years of age, were removed on the same day. The cause of their illness was the eating of small crabs which they had found and attempted to cook themselves.



In October two cases were removed from Nocq Road, St. Sampson's; the occurrence of cases in this neighbourhood is not to be wondered at, but fortunately the work of draining this area is now being taken in hand.

Four cases from the Baissières and one from St. John's district occurred as a result of the drinking of water from a small brook in a grower's property. The contamination of this brook must have been obvious from its course when traced. Shortly afterwards two other cases occurred in the same neighbourhood, probably due to the same cause.

The heat and dryness of the late summer and early autumn caused people working away from the usual water supplies to drink water from any available source, a fact which was readily admitted. Warning notices were inserted in the papers against such a practice, apparently with a good result.

In the last week of November three further cases were notified, one in St. Andrew's, one in the Rohais, and the last a nurse at the Sanatorium.

Fortunately no second case occurred in any house and there were no deaths, a good result as several of the cases were severe ones.

**Table VIII.**

ENTERIC FEVER FOR 1911.

Parishes.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Tl.					
St. Peter-Port .....	-	...	-	...	-	...	-	...	-	2	...	5	...	2	...	-	...	9
St. Sampson's .....	-	...	-	...	-	...	-	...	-	...	-	3	...	-	...	-	...	3
Vale .....	-	...	-	...	-	...	-	...	-	...	-	...	-	...	-	...	-	0
Castel .....	-	...	-	...	-	...	-	...	-	...	-	...	-	1	...	-	...	1
St. Saviour's .....	-	...	-	...	-	...	-	...	-	...	-	...	-	...	-	...	-	0
St. Peter-in-the-Wood .	-	...	-	...	-	...	-	...	-	...	-	...	-	...	-	...	-	0
Torteval .....	-	...	-	...	-	...	-	...	-	...	-	...	-	...	-	...	-	0
Forest .....	-	...	-	...	1	...	-	...	-	...	-	...	-	...	-	...	-	1
St. Martin's.....	-	...	-	...	-	...	-	...	-	...	-	...	-	...	-	...	-	0
St. Andrew's .....	-	...	-	...	-	...	-	...	-	...	-	...	-	1	...	-	...	1
Total .....	-	...	-	...	1	...	-	...	-	2	...	8	...	4	...	-	...	15
SMALLPOX .....	-	...	-	1	...	-	...	-	...	-	...	-	...	-	...	-	...	1

SMALL POX.

The island had fortunately been free from this disease for sixteen years, but in March there was one case.

The patient was by occupation a sailor, although he had been at home for two months before his attack, which was one of moderate severity, but modified by vaccination in infancy.



A curious feature of the case was that the wife and her mother who had formerly been attendants at a small pox hospital in France were suspicious as to the nature of the illness, but its cause could not be ascertained.

It was, however, most likely that it was introduced by means of clothing or letters from France, and as the disease seems fairly common in the French provinces near to us, I have often wondered that we have not had cases before.

This matter I referred to in my report for 1909.

Various rumours reached me that there were suspected cases in Pedvin and Cornet Streets, and with the valuable assistance of the Town Police I made a house to house visitation in these districts without discovering any cases.

All known contacts and all the Servants of the Board (with two exceptions) who were not brought into contact with the case, were re-vaccinated, the objectors being very few.

As the patient had been in the Post Office on Sunday morning for letters at the commencement of his illness, it was feared that further cases might occur as a result, the conditions there somewhat resembling a forcing house for disease. Happily this did not occur, and as the Postal authorities gave me as full a list as they could of the persons present then, I was able to communicate with them and keep them under observation.

The case was brought to my notice after dark, and by a fortunate coincidence Mont Crevelt hospital, which had been used for Scarlet Fever, had been emptied that day; the patients' house was therefore isolated for the night by the Constables' order, the hospital disinfected and the patient admitted before twelve o'clock the next morning.

I have always used Mont Crevelt hospital for Scarlet Fever with great reluctance and trust that an enlarged Sanatorium will in the future obviate such a necessity.

Chicken pox was at once made a notifiable disease, and I saw in consultation several cases which were rather of an unusual type, but fortunately chicken pox was not prevalent at the time.

In the past it had been customary here to burn a large number of articles which were exposed to the infection of small pox, but in this case the ordinary process of disinfection was successfully employed instead.

The Law as regards vaccination in Guernsey fortunately differs from that in England, as it has no "conscience" clause.

In the preamble the case for vaccination is briefly but clearly put in the following words:—

Considering that vaccination is the only means known of preventing the spread of Small Pox.

That this operation offers no danger when it is performed in accordance with the rules of medical science. That not only is it not dangerous at the time of a Small Pox epidemic but that it is the only means of stopping such epidemics.

That Small Pox has almost entirely disappeared from those countries where vaccination and re-vaccination are compulsory and and regularly practised ;

Considering that animal vaccine affords vaccine from a pure source giving absolute security and being capable of satisfying all requirements.

Perhaps the law has not been so strictly enforced as it might have been in the past, but the defaulters have been dealt with during the year with satisfactory results.

I should like to state that vaccination should be efficiently performed, as the protection afforded by it depends upon the size and character of the resultant scars, or in other words upon the amount of re-action. One tiny mark is therefore not an efficient vaccination, although it is unfortunately sometimes all that is attempted.

The statistics of the Metropolitan Asylums Board Small Pox hospitals ought, I think, to carry conviction as to the absolute protection that vaccination and re-vaccination confer against Small Pox.

Before the year 1894 it was customary to allow employees to enter the hospital without being previously re-vaccinated. It was found that in a certain proportion of cases the vaccination which was performed the day of entrance was not successful and perhaps this also occurred on the second occasion, lymph not being then so uniformly active as it is now. If this happened an attack of Small Pox was sometimes the result, a third vaccination if successful being too late to prevent the disease developing.

In 1893, the first year of reliable statistics, of 465 persons employed, 11 developed Small Pox, of these six were members of the regular staff, four of them having been successfully vaccinated in the incubation period but too late to be of service, namely, one, five, two and three days before they sickened.

In these cases, taking the average of the five, the rash appeared on the 14th day after jorning, which means that immediately they were exposed to infection they developed the disease, being unprotected against it. The sixth contracted her illness before she joined, as she sickened on the third day after joining.

Five of the contractor's workmen were affected, none of them having been re-vaccinated, their average period of work before sickening being 19 days; as they were builders' labourers and coal porters they were working out of doors and not in close contact with the sick.

These cases show that a person is not safe from infection in any part of the hospital. In 1894 the procedure was altered and no person employed was admitted to the hospital without having first been successfully and recently vaccinated or re-vaccinated. In nearly every instance this was done by the doctors of the Board.

Since then 12,950 patients have been treated, and the newly employed staff and contractors' workmen have numbered 2,632.

Of the latter two persons developed Small Pox, one a butcher's driver unprotected by re-vaccination, who by a misunderstanding was admitted within the precincts of the hospital premises, though not on board the hospital ships. The second was a nurse transferred from one of the hospitals of the Board who unfortunately was not successfully vaccinated. These figures bear out the statement of the Medical Superintendent that, barring accidents, it is possible to treat Small Pox with immunity to the staff of the hospital.

The neglect of vaccination and the large number of exemption certificates granted in England will undoubtedly before long be followed by extensive epidemics.

The present generations are not familiar with the horrors of the disease as our ancestors knew it. At the end of the 18th century we are told that any woman who was not marked by Small Pox was considered a beauty for that reason, even if naturally less beautiful than the average. If a man were wanted by the authorities and was *not* marked, the fact was of such significance that it was published; numbers of people lost their sight after attacks of the disease, and in the 17th and 18th centuries 7 to 9 per cent. of the deaths in London, and in some years 15 to 18 per cent. were due to Small Pox. The discovery of vaccination has altered all this and it is possible to protect a nation from this loathsome disease and banish it perpetually. No other disease can be attacked successfully in such a direct manner, and to persons who have an intimate knowledge of Small Pox it seems extraordinary that people will not avail themselves of such a simple yet infallible remedy.

This may be illustrated from the practice in the Western States, U.S.A., where the carelessness of the population causes Small Pox to be more or less endemic. Where cases occur in a district the utmost publicity is given, and it is pointed out that any person may render himself immune to the disease if he wishes to do so by vaccination, the authorities proposing to do nothing in the way of isolation save for the severe cases.

The results have been satisfactory, a boom in vaccination has resulted in a large decrease in the number of cases.

#### DISINFECTION FOR 1911.

The following are the details of the work carried out by the Sanitary Inspector during the year :—

Adults and Children's Clothing .....	2,906
Blankets, Counterpanes and Sheets.....	2,350
Bolsters and Pillows .....	1,088
Feather Beds .....	214
Floor Covering .....	488
Mattresses .....	717
Sundry Articles .....	2,062
Rooms for Notifiable Diseases.....	304
Rooms for Phthisis .....	41
Rooms for Non-notifiable Diseases .....	29
Rooms and Wards at the Sanatorium and Mont Crevelt	40
Cow Sheds .....	2
Fish Market ....	1
Primary Schools .....	24
Houses and Cow Sheds visited and re-visited .....	455
Cabin of the <i>Jane Kilgour</i> .....	1

#### WATER SUPPLY.

In the latter part of the Summer the Board had reason to believe that the Water Company were prepared to make certain alterations in the concession which had been previously submitted to the States and rejected by them.

In view of the urgency of the question, a letter was sent to the President of the States with a view to the re-opening of the matter, and although the States were favourable to the proposal, nothing has yet been heard from the Company as to the nature of these modifications.

The Vale Mill quarry was drawn upon to its utmost capacity during the hot summer months and 2,700,000 gallons were supplied from it.



Again and again I have pointed out the great need of an augmented and constant supply for both domestic and municipal purposes.

A large number of houses in the Town rely upon the public pumps for all purposes. As the wells are fairly deep the pumps are hard to work and women and children in addition to pumping water have to carry it long distances and often up flights of stairs to their houses and tenements. It is no wonder then that dirty houses and badly flushed drains cause disease amongst a population so scantily supplied with one of the necessities of life. To add to the difficulty of these unfortunate people some of these pumps have in the summer run dry.

Outside the Town the increase in the population and number of dwellings, the intense cultivation of the soil, the increasing use of manures of all sorts have made it more and more difficult to obtain good water for drinking purposes.

The provision of an abundant supply of pure water is one of the first essentials for any community. This fact was grasped by the Ancient Romans, who made the most strenuous efforts to ensure it for themselves.

Such a supply causes a diminution in the general sickness and death rate, not only in the rate from water-borne diseases such as Diarrhoea and Enteric Fever.

Good health is impossible when contaminated water is habitually taken; no very definite sickness may result from it as a certain amount of immunity from continued use may develop, but anæmia, sore throats, loss of appetite, digestive and intestinal disturbances are some of the symptoms of the chronic poisoning which are usually present.

What we need is the purification and storage of water from the King's Mills stream, which, together with the existing wells of the Water Company, will give an ample and constant supply wherever required. The most urgent question in the Island is that of the water supply, yet it is unfortunately one over which it is impossible to arouse any sustained or effective public interest.

In Jersey there are reservoirs storing 40,000,000 gallons of water with suitable filters for dealing with the stream water which is the source of the public supply.

The States Analyst with his long experience is able to state that "the water may be regarded as quite wholesome and trustworthy."

In Guernsey we have no works of this sort, but whilst at times suffering acutely from shortage of water, allow the streams which would abundantly supply our wants to run wasted into the sea.

The older sewers of the Town are still unventilated, and as so many of the house drains are badly flushed causing retention and decomposition of the sewage, and the rising of the tide forces back the sewer gas and confines it under pressure, that danger of traps being rendered inefficient is a real one. This condition should therefore be remedied without delay.

The system of collecting household refuse in the Town parish still remains unaltered and measures should be taken to improve it.

I have often referred to the existence of "Diphtheria" houses in our midst, and to the fact that Tuberculosis is a House disease, it naturally follows that the question of providing better housing accommodation for the working-classes should engage our earnest attention.

Consideration of space forbid my entering more fully into this matter which has been dealt with in former reports.

In 1910 I mentioned some of the clauses of the Children's Act, including the one relating to the punishment of parents or guardians who neglect children in a manner likely to cause injury to their health, or fail to provide for them adequate food, clothing, medical aid or lodging, or if unable to do so to apply to the proper authority for relief.

It appears to me that this clause would be a valuable one for dealing with cases, so common here, of parents who do not call in a doctor but conceal cases of infectious diseases in their families.

These people, although their negligence causes infectious disease to run riot, to the alarm and expense of the community, cannot now be held answerable for their actions as they should be.

There is unfortunately no law here providing for the protection of people working amongst machinery.

In England the Factory and Workshop Acts deal fully with the matter. It is more humane and rational to protect workmen from avoidable accidents than to provide compensation for them or their families after accidents.

HY. DRAPER BISHOP,  
M.D., M.O.H.

